

S/149/61/000/002/004/017  
A006/A001

Developing a Method of Preparing Basic Salt of 5/6 Aluminum Oxychloride

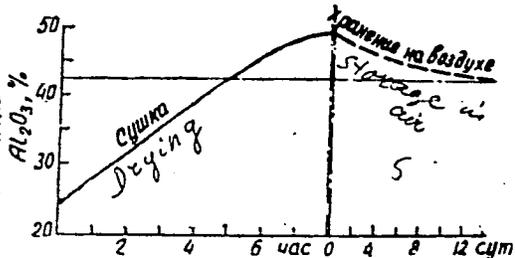


Figure 5:

Drying of Al(OH)<sub>5</sub>Cl gel at 95°C and storage of dried powder in air at 20°C

There are 5 figures and 16 references: 12 Soviet and 4 non-Soviet.

ASSOCIATIONS: Krasnoyarskiy institut tsvetnykh metallov (Krasnoyarsk Institute of Non-Ferrous Metals); Kafedra metallurgii legkikh metallov (Department of Metallurgy of Light Metals)

SUBMITTED: May 17, 1960

Card 7/7

SHCHEPACHEV, B.M. (Khar'kov)

Using aluminum hydroxycchloride for coagulation in water purification. Vod.i san.tekhn.no.10:13-14 0 '62. (MIRA 15:12)  
(Aluminum chloride) (Water--Purification)

ca

7

An investigation of causes of formation of "pock-marks" on sheet iron. I. Yu. Tantz, M. I. Shechepak, N. P. Smolyakov and G. V. Lyavdanskii. *Dokl. Akad. Nauk SSSR*, No. 6, 20-30. The sheet metal examined was intended for the canning industry and was of very high grade. It analyzed 0.08% C, 0.02% Mn, 0.01% P and 0.005% S. It was rolled in thicknesses between 0.22 and 0.51 mm. "Pock-marks" were characterized by a

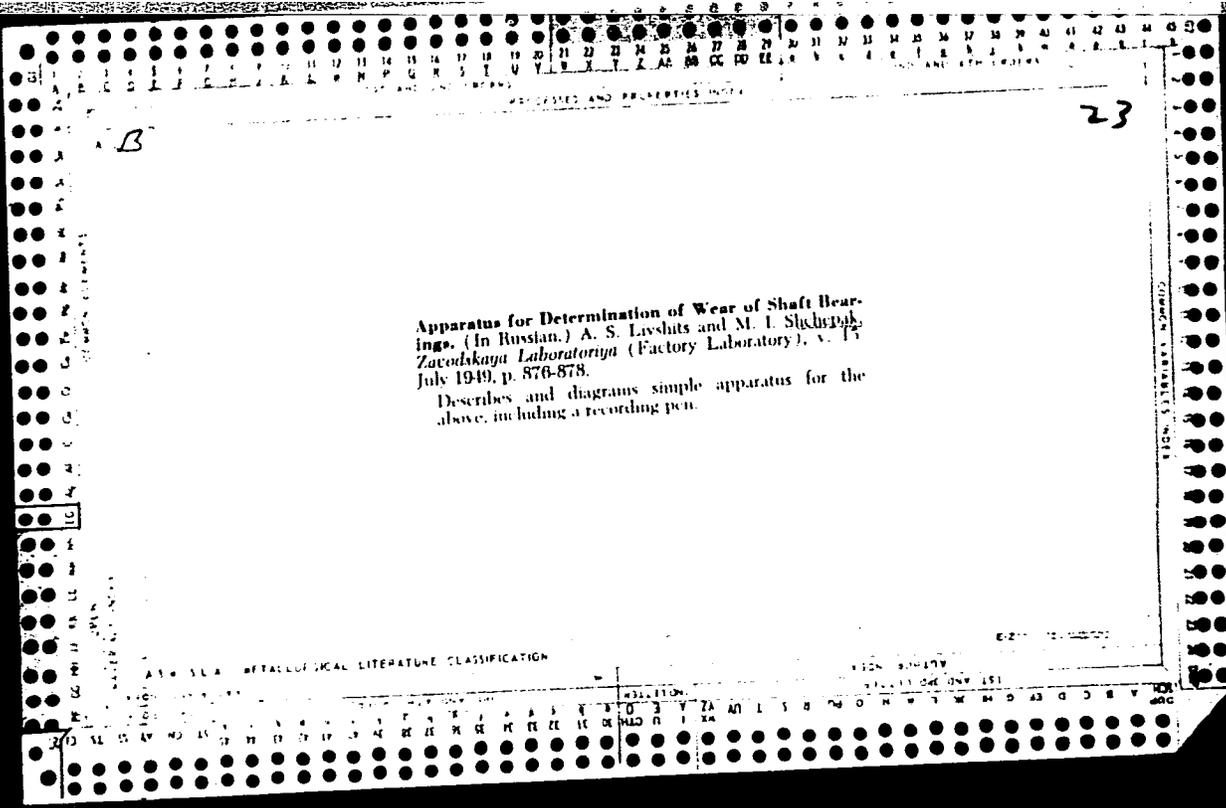
kind of roughness on the surface, in the form of waves of various amplitudes and directions. A study of the causes of this defect was made through a chem. and micro-graphical analysis of the defective sheets and by a study of the effect of the regime of heating and rolling on the quality of the product. It was found that the quality of the ingots, that is, the amt. of impurity and air pockets, on the one hand, and irregularities in heating and rolling, on the other, were mainly responsible for the "pock-marks" on the sheets. To improve the quality of the product it is recommended to deoxidize the metal while rolling by adding about 0.5 kg. of Al per ton, to avoid formation of impurities in the pipe of the ingots and to avoid heating the metal above 850° during rolling.

S. I. Madorsky

ASM S.L.A. METALLURGICAL LITERATURE CLASSIFICATION

Secondary crystallization of steel in connection with conditions of formation of Widmanstätten structure. V. N. Sychenkov and M. I. Shepepk. *Dokl. Akad. Nauk SSSR* 1934, No. 9, 29-49. An exper. investigation was made of the effect of temp. and time of heating, of rate of cooling in the critical interval, and of artificially produced strains at high temps. on the forms of secondary crystal of pearlitic steel. The samples studied contained C 0.48, Mn 0.86, Si 0.34, S 0.010 and P 0.007% and had the critical points  $A_1$  750°,  $A_c$  715°,  $A_c$  700° and  $A_c$  680°. Heating temp. varied between 100° and 1250° and time of heating between 2 and 7.5 hrs. On heating the steel above the point  $A_c$ , some of the austenite crystals had a tendency, during the process of formation, to grow at the expense of adjacent nongrowing crystals; this tendency increased with temp. and time. This phenomenon is explained as due to a strain produced by a change of vol. of the steel as it changes from  $\alpha$ - to  $\beta$ -form in the critical interval. The selective growth of austenite crystals becomes more pronounced when the heating and cooling of the sample take place under conditions of artificial strain produced in the sample; this supports the above conclusion that nonuniform growth of crystals is caused by an internal strain. Ferrite begins to crystallize around the austenite crystals simultaneously at a large number of points. Thickness of ferrite layer is inversely proportional to rate of cooling. The Widmanstätten figures begin to appear among the larger and more rapidly growing crystals. In the interval of rates of cooling, 4-34°

min., a higher rate is more favorable to the formation of the Widmanstätten structure, but no min. rate was found at which this structure began to appear. However, this structure appeared only when the heating temp. was high and the crystals were large. The Widmanstätten figures can be considered as a special arrangement of layers of pearlite. Numerous photomicrographs are given. S. I. Madorsky



PLYATSKOVSKIY, O.A., kandidat tekhnicheskikh nauk; LIVSHITS, A.S., kandidat tekhnicheskikh nauk; SHCHEPAK, M.I., inzhener; LOZINSKIY, A.B., inzhener; KRYUKOV, I.I., inzhener.

Increasing the sturdiness of pilger mill rolls by means of weld seams. Vest. mash. 33 no.11:87-88 N '53.

(MLRA 6:12)

(Rolling-mill machinery)

26187  
S/081/61/000/012/012/028  
B110/B216

188300

AUTHORS: Bogoyavlenskaya, N. V., Lipkin, Ya. N., Shchepak, M. I.

TITLE: Acid pickling of high-alloy steel tubes

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 12, 1961, 326, abstract  
124205 (12I205) ("Tr. Ukr. n.-i. trubn. in-ta", 1959, no. 2,  
245 - 254)

TEXT: A pickling solution consisting of  $\text{HNO}_3$  and  $\text{HF}$  ensuring satisfactory pickling of tubes made of high-alloy steels is recommended. Pickling in this solution is performed quickly (5 - 40 min) involving minimum losses of metal ( $20 - 180 \text{ g/m}^2$ ) and may be carried out with high efficiency ( $700 - 800 \text{ m}^2/\text{m}^3$ ) at comparatively low temperatures (30 - 45°C). The process is not accompanied by pickling too deep, pitting, hydrogen embrittlement or formation of cracks due to corrosion. [Abstracter's note: Complete translation.]

Card 1/1

SHCHERPAK, V., mayor; SHVARTSZOYD, V., gvardii starshiy leytenant.

Experience with on-the-job training of military students. Voen.-inzh.  
zhur. 101 no.11:12-14 N '57. (MLRA 10:11)  
(Military education)

SHCHEPAK, V.M.; SELETSKIY, T.M. [Selets'kyi, T.M.]; PETRASHKEVICH, M.A.  
[Petrashkevych, M.I.]; TRUSHKEVICH, R.T.

Thermal waters in the Carpathians. Geol.zhur. 22 no.5:66-69  
'62. (MIRA 15:12)

1. Trest "L'vovneftegazrazvedka", Ukrainskiy nauchno-issledovatel'skiy  
gornorudnyy institut i L'vovskaya geologo-razvedochnaya kontora.  
(Carpathian Mountains---Thermal waters)

SECRET

... .. bearing  
... ..

(SIA 17:12)

... ..  
... ..

SHCHEPAK, V.M.; MYASNIKOV, V.I. [M'iasnykov, V.I.]

Some characteristics of the distribution of iodine and bromine  
in the underground waters of the outer zone in the Carpathian  
piedmont fault. Geol. zhur. 23 no.2:64-71 '63.

(MIRA 16:6)

1. Trest "L'vivnaftogazrozvidka".

(Carpathian Mountain region—Mineral waters—  
Analysis)

SHCHEPAK, V.M.; IVANOV, A.K. [Ivanov, O.K.]

Ways of gas migration in the external zone of the Carpathian  
piedmont fault. Dop. AN URSSR no.7:953-956 '64. (MIRA 17:9)

1. Institut geologii i geokhimii goryuchikh iskopayemykh AN UkrSSR.  
Predstavleno akademikom AN UkrSSR V.B.Porfir'yevym [Porfyr'iev, V.B.].

SHCHEPAK, V.M.

Effect of the development of the Ugersko and Bil'che-Volitsa  
gas fields on the gas pools of the northern Medynichi gas region.  
Geol. nefiti. i gaza 8 no.10:18-22 0 '64. (MIRA 17:12)

1. Institut geologii i geokhimi goryuchikh iskopayemykh AN  
UkrSSR.

IVANOV, A.K. [Ivanov, A.K.]; F.L., M.A. [F.L., M.A.]; SHCHEPAK, V.M.

Formation of the Kaitano gas field. Dop. AN URSR no.4:510-514  
195. (MIRA 18:5)

1. Institut geologii i geokhimii goryuchikh iskopayemykh AN URSSR.

KHAKHAREV, L.M., inzh.; SHCHEPAKIN, A.I., inzh.

The GT 101-001 gas-turbine locomotive. Mashinostroenie no.1:  
78-82 Ja-F '62. (MIRA 15:2)

1. Luganskiy teplovozostroitel'nyy zavod.  
(Gas-turbine locomotives)

GAMBURG, D.Yu.; RYABTSEV, I.I.; KOTKOVSKIY, A.P.; SHCHEPAKOV, S.A.

Gasification of milled peat in a gas producer with a "fluidized"  
bed. Report No. 1: (Production of vapor-air gas). Trudy Inst.  
torfa AN BSSR 7:198-216 '59. (MIRA 14:1)  
(Peat gasification)

GAMBURG, D.Yu.; RYABTSEV, I.I.; KOTKOVSKIY, A.P.; SHCHEPAKOV, S.A.

Gasification of milled peat in a gas producer with a "fluidized  
bed. Report No. 2: Production of semiwater gas. Trudy Inst.  
torfa AN BSSR 7:217-231 '59. (MIRA 14:1)  
(Peat gasification) (Water gas)

GAMBURG, D.Yu.; RYABTSEV, I.I.; KOTKOVSKIY, A.P.; SHCHEPAKOV, S.A.

Gasification of milled peat in a gas producer with a "fluidized"  
bed. Report No. 3: Production of water gas. Trudy Inst. torfa  
AN BSSR 7;:232-239 '59. (MIRA 14:1)  
(Peat gasification) (Water gas)

SHCHEPALOV, I.

Automation in hydroelectric power stations. Pozh.delo 9 no.2:14  
F '63. (MIRA 16:3)  
(Hydroelectric power stations—Fires and fire-prevention)

VOZNESENSKIY, N., inzh.; SHCHEPANKEVICH, B., inzh.

Use of plastics for sprinklers. Pozh.delo 8 no.4:23-25 Ap  
'62. (MIRA 15:4)

(Plastics) (Fire sprinklers)

1. Introduction, A. 1.

Dissemination: The results of the activities of Subversive Groups of Semi-Organized Agents in the State of New York. (Referativnyy Zhurnal--Sovetskoye Voennoye Delo, 1957, No. 10)

SO: WRI 200, 14 Oct 1957

SH CHAPAN KRUHEL, B.P.

SOV/143-58-10-20/24

**AUTHORS:** Andriyevskiy, A.I., Antanovich, A.V., Bogatyrev, M.A.,  
 Gubenko, I.P., Gubenko, I.P., Zamora, Ye.F., Kaban-  
 chikov, I.M., Kaban, V.I., Lukin, N.I., Makatskiy, I.S.,  
 Meyer, V.P., Petrov, S.I., Papanov, Ye.A.,  
 Privalova, K.A., Sitnitskiy, Yu.I., Stankov, M.T.,  
 Shchepankovich, B.P., Chuchman, I.S., Yagelis, I.K.,  
 Brilinskiy, B.M., and others

**TITLE:** G.Ye. Krushel', Deceased

**PERIODICAL:** Izvestiya vysshikh uchebnykh zavedeniy, Energetika,  
 1958, Nr 10, p 147 (USSR)

**ABSTRACT:** This is an obituary of Doctor of Technical Sciences,  
 Professor G.Ye. Krushel' of the L'vov Polytech-  
 nic Institute. Krushel' was born in Moscow in 1912  
 as the son of an engineer. He died on July 23, 1958  
 because of an accident. He graduated in 1931 from  
 the "Proftekhkola". While working in the industry,  
 G. Ye. Krushel' studied at the Khar'kovskiy Inzhinir-  
 mashinostroitel'nyy institut (Khar'kov Institute of

Card 1/3

SOV/143-58-10-20/24

extensively prize movers for the feed pumps of high-  
 power ball mills. Besides research work,  
 Krushel' devoted his attention to the training of  
 engineers in his field. The Soviet Union ranks  
 of its foremost scientists. There is a photograph.

Card 3/3

SHCHEPANKOV, N

AID P - 2242

Subject : USSR/Aeronautics

Card 1/1 Pub. 135 - 6/19

Author : Shchepankov, N., Col.

Title : Improve the organization and the procedure of flying-tactical and aviation instruction.

Periodical: Vest. vozd. flota, 7, 25-27, J1 1955

Abstract : The author takes the example of one of the units to describe the organization and the procedure of tactical and aviation training. Several names are mentioned.

Institution: None

Submitted : No date

SHCHEPANKOV, N., general-mayor aviatsii; KRYLOV, A., polkovnik

We should teach our fliers to be exact and industrious.  
Komm.Vooruzh.Sil 3 no.20:32-37 0'62. (MIRA 15:10)  
(Russia--Air force) (Military discipline)

SHCHEPANKOV, N.F., general-mayor aviatsii

Lessons are needed! But which? Vest.Vozd.Fl. no.6:33-36  
Je '61. (MIRA 14:8)  
(Russia--Air force --Officers)

ADIGAMOV, Ya.M.; IOFIN, S.L.; NASUPA, N.A.; FEDOSOV, M.K.; SHCHEPANOV, P.A.

Improving the working of the Zolotushinskoye deposit. Sbor.  
trud. VNIITSVETMET no.4:20-36 '59. (MIRA 16:8)

(Mining engineering)

KORCHAGIN, M.V., prof.; SHCHEPANKOVAYA, V.V., aspirant

Studying the migration of acid dyes on polyamide fibers.

Tekst. prom. 24 no.10:60-63 1964.

(MIR- 17 12)

1. Moskovskiy tekstil'nyy institut.

SHCHEPANOVSKIY, N.

Insertion of subtitles on finished positive film copies. Kinomekhanik no.8:  
22-24 Ag '53. (MLRA 6:8)

(Moving pictures--Titling)

SHCHEPANSKIY, I.S. (Leningrad)

Proof of the theorem of the volume of an oblique parallele-  
piped. Mat.v shkole no.4:69 J1-Ag '59. (MIRA 12:11)  
(Prisms)

SHCHEPANSKIY, L. A.

USSR/Miscellaneous - Industrial processes

Card 1/1 : Pub. 104 - 6/9

Authors : Minakov, A. G., Shchepanskiy, L. A., Andrega, P. N., and  
Dubrovskiy, V. A.

Title : Use of zinc chloride as a glass grinding accelerator

Periodical : Stek. i ker. 8, 23-25, Aug 1954

Abstract : The characteristics of  $ZnCl_2$ , when used as a glass grinding accelerator, are described. The accelerating effects of other grinding solutions  $CuCl_2$ ,  $CuSO_4$ ,  $ZnSO_4$ ,  $FeSO_4$ ,  $FeCl_3$  and  $Cd(CH_3COO)_2$ , are discussed. The advantages derived from using  $ZnCl_2$  glass grinding accelerators, are listed. Tables.

Institution : ....

Submitted : ....

SHCHEPANSKIY, L. A.

Use of zinc sulfate for accelerating the glass etching process. A. G. Minakov, L. A. Shchepanskiy, P. N. Andrega, and V. A. Dubrovskiy. *Silikalichesk. 6*, 303-4 (1955).—See C.A. 49, 8561h. W. Rittel

4

DM

MINAKOV, A.G.; SHCHEPANSKIY, L.A.; ANDREGA, P.N.; DUBROVSKIY, V.A.

Answer to the K.Gesse's article. Stek.l ker. 12 no.12:23-25 D '55.  
(MLRA 9:3)

(Glass manufacture) (Zinc sulfate)

MAN'KOV, Kiril Terent'yevich; SHCHEFANSKIY, O.I.

[Methods of planning specialization and cooperation of state farm branches, based on the example of the Krasnoznamenskii State Farm in Bashkiria] Metodika proektirovaniia spetsializatsii i sochetaniia otraslei v sovkhoe; na primere Krasnoznamenskogo sovkhoe Bashkirskoi ASSR. Ufa, Bashkirskoe knizhnoe izd-vo, 1961. 52 p.

(MIRA 15:5)

(Bashkiria--State farms)

SHCHEPANSKIY, V.N.

Preparation and processing of metal scrap in the Ukrainian S.S.R.  
Met. i gornorud. prom. no.5:27-29 S-0 '64. (MIRA 18:7)

1. Nachal'nik "Ukrglavvtormeta".

SHCHEPANSKIY, V.N.; DOBRIN, B.R.

Processing lightweight scrap metal with heavy duty packeting  
presses and utilizing it in open-hearth production. Stal' 25  
no.4:381-382 Ap '65. (MIRA 18:11)

SUBJECT: [REDACTED]

Department of State - Bureau of Intelligence and Research, no. 6:71-72  
(INTRA 17:8)

1. [REDACTED]

SHCHEPANSKIY, V.N.; DOBRIN, B.R.

Production and supply of scrap and rejects of ferrous metals in the Ukrainian S.S.R. Stal' 25 no.7:670-671 J1 '65. (MIRA 18:7)

1. Ukrglavvtormet..

REZAYEV, N.I.; MICHURIN, K.

Studying molecular interstellar in solution from Raman scattering;  
line contours. *Izv. Akad. Nauk. Ser. 3: Fiz., astron. 20 no.2:13-19*  
Apr-May '65. (MIRA 18:5)

1. Kazan, Kazan State University.

REZAYEV, N.I.; SHCHEPANYAK, K.

Use of Raman line contours in studying molecular interaction in solutions. Opt. i spektr. 16 no.3:436-445 Mr '64. (MIRA 17:4)

L 9886-66 EWT(1)/EWT(m)/EWP(j) IJP(c) RM  
ACC NR: AP5027665 <sup>44,55</sup> SOURCE CODE: UR/0051/65/019/005/0738/0742

AUTHOR: Rezayev, N. I.; Shchepanyak, K. <sup>44,55</sup> 55  
B

CRG: none

TITLE: The effect of intramolecular interaction on the outline of bands of Raman spectra of dioxane <sup>44,55</sup> in solutions

SOURCE: Optika i spektroskopiya, v. 19, no. 5, 1965, 738-742

TOPIC TAGS: raman spectrum, spectroscopy, dioxane, molecular interaction  
<sup>21,44,55</sup> <sup>21,44,55</sup>

ABSTRACT: Dioxane (I) solutions in H<sub>2</sub>O, CHCl<sub>3</sub>, and CCl<sub>4</sub> were investigated. A photoelectric spectrometer (DSF-4) with light scattering 6.7 Å was used for the measurements, the 4358/Hg line as excitation source, and an aqueous NaNO<sub>2</sub> solution as light filter. The accuracy of the measurements of the integral intensity (I) of bands was 5-20% and the width, 5-10%. The temperature was 25 C. The results indicate that the interaction H<sub>2</sub>O-H<sub>2</sub>O affects the contour of the band for the OH group much stronger than I-H<sub>2</sub>O (see Malyshev, V. I. Kand, diss. MZU, 1940). Nevertheless, the presence of (I) has a considerable effect on the H<sub>2</sub>O

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UDC: 535.375+539.9

L 9886-66

ACC NR: AP5027665

band, as the width becomes greater and  $\delta$  almost equals that of pure water. (I) molecules interact strongly also with each other. Comparison of the bands obtained for pure (I) with those in  $\text{CHCl}_3$  or  $\text{CCl}_4$  shows a very definite decrease in the width at frequencies 1305, 1440, 2854, and  $2966 \text{ cm}^{-1}$ . The intramolecular interaction may take place, e.g., through an H bond of a CH group of one molecule and an O of another. CH group valence vibration bands appear wider than those of fully symmetric vibration of the O-containing ring. For (I) in  $\text{H}_2\text{O}$ , where the interaction (I)-(I) is replaced by I- $\text{H}_2\text{O}$ , bands 1305 and 1440, and especially 2854 and  $2966 \text{ cm}^{-1}$ , undergo a less substantial change in width. Orig. art. has: 2 figures and 2 tables.

SUB CODE: 07/<sup>20/</sup> SUBM DATE: 20Jul64/.

NR REF SOV: 006/ OTHER: 005

*(Handwritten initials)*  
2/2

ACC NR: APT006578

(A)

SOURCE CODE: UR/0230/66/000/012/0005/0006

AUTHOR: Komarov, A. A. (Candidate of technical sciences); Shchepelev, A. M. (Chief engineer of Artyashta-Podobas railroad line project); Kravchenko, S. A. (Engineer)

ORG: None

TITLE: Rational roadbed profiles in territories where snowdrifts are prevalent

SOURCE: Transportnoye stroitel'stvo, no. 12, 1966, 5-6

TOPIC TAGS: railway engineering, snow, railway construction

ABSTRACT: The authors consider the problems of keeping trains on schedule in Siberia and the far north during the snowy season when drifts may reach heights of greater than one meter. The design of the roadbed profile is an important factor in keeping the tracks clear of snow. Snowdrifts may be prevented by digging shallow trenches with sloping banks having a grade of 1:10. Theoretical studies and experiments in wind tunnels have shown that trenches with reserve canals on the side of the prevailing wind are less susceptible to drifting snow. These canals have a comparatively steep slope (1:1.5) which breaks up the air stream so that snow builds up in the canal against the bank. The depth of the snow in the canal builds up extremely slowly since the main part of the snow is carried across the canal and the roadbed and is deposited beyond the trench on the far side. Thus these trenches are important in that they

Card 1/2

UDC: 625.12.001.12

L 38451-66 EWI(1)/FCC GW  
ACC NR: AT6023724

SOURCE CODE: UR/2831/65/000/014/0013/0020

AUTHOR: Polyakov, V. M.; Shchepkin, L. A.

45  
B-1

ORG: none

TITLE: Peculiarities of regular changes in ionization and structural parameters of the ionospheric F2 layer

SOURCE: AN SSSR. Mezhdunarodnyy geofizicheskiy komitet. V razdel programmy MGG: Ionosfera. Sbornik statey, no. 14, 1965. Ionosfernyye issledovaniya, 13-20

TOPIC TAGS: ~~ion concentration, ionization, recombination, balance equation, electron concentration, ion formation, critical frequency, critical height~~, photochemical equilibrium, F layer, atmospheric ionization, atmospheric recombination, ionospheric electron density, atmospheric ion concentration

ABSTRACT: The change of ion concentration in the F2 layer can be considered to be a result of ionization and recombination processes in this layer. These processes are studied by the balance equation for electron concentration

$$d[e]/dt = q(t) - L \equiv q_0\phi(z, t) - L,$$

where  $q_0$  is a constant;  $\phi(z, t)$  is a function characterizing the change of atmospheric illumination;  $L$  is the term of recombination and it expresses the quantity of free electrons lost from a unit volume during one second. The recombination term  $L$  depends upon the form of electron recombination. Maximum formation of ions occurs at large

Card 1/2

L 38451-66

ACC NR: AT6023724

zenithal distances of the Sun, and the electron density in the F2 layer attains the maximum value in the morning. Another maximum formation of electrons takes place in the F1 layer at small zenithal distances of the Sun. The electron concentration in the F2 layer was studied on the basis of data obtained from observations at Irkutsk, Tomsk, and Sverdlovsk. The intensity of ionization determined for an optical depth equal to one was represented graphically. The basic process in the F2 layer is the dissociative recombination of molecular ions with electrons. Atomic ions disappear during the exchange of charges with neutral molecules forming molecular ions. During rapid changes in electron concentration the photochemic equilibrium is disturbed. The speed of recombination is variable except in the summer, as experimental data show. In winter the concentration of molecular ions changes throughout the day. The F2 layer has one maximum of ion formations and electron concentration occurring when the Sun is in low positions above the horizon. This occurs during the winter and in the morning and evening. The main maximum of ion formation in the F1 layer occurs when the Sun is in a high position above the horizon. The F2 layer appears when there is a variable effective recombination coefficient. Orig. art. has: 4 figures and 13 formulas. [EG]

SUB CODE: 04/ SUBM DATE: none/ ORIG REF: 007/ OTH REF: 006/ ATD PRESS: 5042

SHCHEN: 03/14/2001, inzh.

Some problems in designing roadbeds. Transp. stroi. 15 no. 5:37-39  
by 165. (MIRA 18:7)

L 27519-66

ACC NR: AP5022955 (A) SOURCE CODE: UR/0317/65/000/002/0042/0045

AUTHOR: Shchepelov, N. (Lieutenant Colonel)

12  
B

ORG: None

TITLE: Built by a squad

SOURCE: Tekhnika i vooruzheniye, no. 2, 1965, 42-45

TOPIC TAGS: military engineering, structural engineering

ABSTRACT: The erection of bridges by small engineer combat squads is discussed. A seven-men engineer squad can build a 40 to 60 ton bridge at a rate of several decameters per hour by using standard prefabricated parts and assemblies (ground beams, wooden or metal frames, interlayers, spacers, bridging planks and boards, struts, braces, etc.). The standard bridge elements were presented in a table giving their dimensions and the number of parts required for construction. The mounting of these parts and the building practice were explained and illustrated by a series of pictures. The work can be made easier and faster by using adjustable supports and light frames made of duralumin. Orig. art. has: 2 sets of photos and 1 table-diagram.

SUB CODE: 13 / SUBM DATE: None / ORIG REF: 000 / OTH REF: 000

1/1 BLG

SHCHEPELEV, V.

Glorious anniversary. Grazhd. av. 14 no.8:7 Ag '47.  
(Aeronautics, Commercial)

(MLRA 10:9)

SHCHEPPELEV, V.; SEMENOV, M. (Kiyev); BOLOTOV, N.; PAZIKOV, A. (Leningrad)

Facts, events, people. Kryn. rod. 16 no.1:18-19 Ja '65.  
(MIRA 18:3)

1. Starshiy inspektor upravleniya kadrov Ministerstva grazhdanskoy  
aviatsii (for Shchepelev).

SHCHEPELEV, Valeriy.

With those who fly. Grazhd. av. 14 no.10:25-26 0 '57. (MIRA 10:12)  
(Kobrianov, Mikhail Sergeevich)

SICHTEPERIN, G.M.; VITROV, A.G.; LASHKOV, B.P.

Experience in using aerial photographic survey materials  
for the zoning of areas according to conditions under which  
prospecting is to be conducted. Vop. rud. geofiz. no.5:  
68-75 '65. (MIRA 18:9)

ARKHANGEL'SKIY, B.A.; SHCHEPERIN, G.M.

Practice in mapping Lower Paleozoic formations as revealed  
by a study made in central Kazakhstan. Vop.rasved.geofiz.  
no.4:87-92 '64. (MIRA 19:1)

S/124/60/000/006/021/039  
A005/A001

Translation from: Referativnyy zhurnal, Mekhanika, 1960, No. 6, p. 137, # 7742

AUTHOR: Shchepetev, A.N.

TITLE: On Three Particular Solutions of the Lamé Equations of the Two-Dimensional Elasticity Theory in Polar Coordinates for Absent Body Forces

η<sub>0</sub>



PERIODICAL: Tr. Nauchn. konferentsii Stalinskogo ped. in-ta, No. 2, Kemerovo, 1957 (1958), pp. 330-359

TEXT: The equations of the two-dimensional problem of the elasticity theory in polar coordinates are reduced by the substitution  $r = ae^{\rho}$  to equations with constant coefficients in the functions  $\Delta_1, w_1$  (volume dilatation and rotation at a point); the equations obtained are used for deriving the particular solutions of the two-dimensional problem in the variables  $\rho, \theta$ . Then it is suggested to use these solutions for solving the problems of the deformation of a circular beam and a wedge.

V.K. Prokopov

Translator's note: This is the full translation of the original Russian abstract.

Card 1/1

SMOLOVIK, I.I. (g.Novokuznesk, Kemerovskoy oblasti); SHCHEPETEV, A.N.  
(g.Novokuznets, Kemerovskoy oblasti)

Problem of an arbitrary compression of a hollow circular cylinder  
under arbitrary loading on the lateral surface. Inzh.zhur. 1 no.3:  
176-181 '61. (MIRA 15:2)

(Cylinders)

30999  
S/124/61/000/009/024/058  
D234/D303

24.42.00 1327

AUTHOR: Shchepetev, A.N.

TITLE: On two particular solutions of Lamé's equations of the plane theory of elasticity in polar coordinates

PERIODICAL: Referativnyy zhurnal. Mekhanika, no. 9, 1961, 4, abstract 9 V24 (Nauchn. dokl. vyssh. shkoly. Fiz.-matem. n., 1959, no. 3, 78-82)

TEXT: Two groups of particular solutions are constructed of the equations of the theory of elasticity, in the displacements  $u$  and  $v$  in the directions of the axes of polar coordinates  $r$  and  $\theta$ . In the first case

$$u = e^{-\alpha r} [A_0(\rho) + A_v(\rho) \operatorname{ch} \alpha \theta + B_v(\rho) \operatorname{sh} \alpha \theta]$$

$$v = e^{-\alpha r} [C_0(\rho) + C_v(\rho) \operatorname{ch} \alpha \theta + D_v(\rho) \operatorname{sh} \alpha \theta]$$

are derived; after substituting these expressions in Lamé's equa-

Card 1/2

4/30

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D234/D303

On two particular solutions...

tions, systems of ordinary differential equations are obtained, whose solutions are found to be as follows:

$$A_0 = A_{01}e^{(q-1)\rho} + A_{02}e^{(q+1)\rho}, \quad C_0 = C_{01}e^{(q-1)\rho} + C_{02}e^{(q+1)\rho}$$

$$A_v = Ae^{\beta\rho}, \quad B_v = Be^{\beta\rho}, \quad C_v = Ce^{\beta\rho}, \quad D_v = De^{\beta\rho}$$

$$\beta_{1,2} = q + 1 \pm \alpha i, \quad \beta_{3,4} = q - 1 \pm \alpha i$$

They contain 8 independent coefficients. In the second case, analogous solutions of the form

$$u = e^{-\rho} [a_0(\theta) + a_v(\theta) \operatorname{ch} \rho\rho + b_v(\theta) \operatorname{sh} \rho\rho]$$

$$v = e^{-\rho} [c_0(\theta) + c_v(\theta) \operatorname{ch} \rho\rho + d_v(\theta) \operatorname{sh} \rho\rho].$$

are found. Expressions for the stresses  $\sigma_r, \sigma_\theta, \tau_{r\theta}$  are also given. [Abstracter's note: Complete translation]

Gard 2/2

X

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SHCHEPETEV, A.N. (Novokuznetsk)

Some problems in the plane theory of elasticity in polar coordinates.

Inzh.zhur. 1 no.4:154-159 '61.

(MIRA 15:4)

(Elasticity)

SHOEPTEV, N.F.

In the State Committee of the Council of Ministers of the  
R.S.F.S.R. for the Coordination of Research Work. Torf.prom.  
39 no.2:33-35 '62. (MIRA 15:5)

(Peat--Transportation)

USSR / Farm Animals. Domestic Fowls.

Q-4

Abs Jour: Ref Zhur-Biol., No 12, 1958, 54839.

Author : Shchepetil'nikov L. N.  
Inst : Not given.  
Title : The Breeds of Pigeons.

Orig Pub: Ptitsevodstvo, 1957, No 6, 41-43.

Abstract: The author subdivides wild pigeons into field, mountain, and forest pigeons, and the domestic pigeons into ordinary, carrier, racing, decorative, and meat pigeons. A brief description of each group is provided.

Card 1/1

49

The determination of heat value coefficients for actual thermal circuits of steam turbine installations.  
(Cont.) 96-7-2/25

heating, then the total change in the consumption of heat of live steam will be less than  $q$  and namely,  $\Delta Q = -\epsilon q$ . The dimensionless magnitude  $\epsilon$  is called the heat value coefficient. A formula is given for the approximate determination of  $\epsilon$ . There has recently been a tendency to use similar methods abroad. Although the method is very simple the formula for  $\epsilon$  which is given cannot always provide a satisfactory solution particularly for circuits with reheat and it is therefore necessary to find improved methods of determining heat value coefficients. Work on this subject under the leadership of Prof. Ya.M. Rubinshteyn led to the development of simple recurrent formulae for  $\epsilon$  which not only give the numerical values of heat value coefficients but also make possible analytical considerations of various kinds of changes in the circuit. The heat value coefficient for any actual installation should be derived from the thermal circuit uncomplicated by additional heat exchangers which are

Card 2/4

The determination of heat value coefficients for actual thermal circuits of steam turbine installations. (Cont.)

96-7-2/25

graphs for typical machines. It is also interesting to compare the specific heat consumption obtained from the efficiency of the cycle with the specific heat consumption obtained from tests with allowance for additional heat losses. Such a comparison which is made in Table 4, shows that the heat losses (which are mainly due to leakage of steam through the glands) turned out to be greater than expected and increased the specific heat consumption by about 0.7%.

Card 4/4

There are 4 figures, 4 tables and 7 references of which 4 are Slavic.

ASSOCIATION: Ivenergo.

AVAILABLE:

96-98-1-1/3

Analysis of the Influence of Small Changes in the Thermal Circuit by  
the Method of Heat-Value Coefficients

evaporator (see Fig.1).

Further, from this idea, the article gives a method of finding  
new values of the efficiency of a thermal circuit when small  
changes are made in it. Partial formulas are offered for  
determining changes in the efficiency. Special cases that are  
considered include: change in the drainage enthalpy; instal-  
lation of a drainage pump at the heater; disconnection of the  
drainage pump at the heater; replacing a contact by a surface-  
heater and interruption of cascade heating, etc.

The changes in thermal circuits that are considered include  
those that are used in circuit analyses. It is shown  
that if two changes in the circuit are made simultaneously, they  
can be analyzed separately. A formula is given that can be  
used to find the number of changes that can be made at once. There are 2  
figures and 1 Russian reference.

ASSOCIATION: Energy

AVAILABLE: Ministry of Coal, Heat

Card 2/2

- 1. Heat-Analysis
- 2. Heat-Distribution





SHCHEPETIL'NIKOV, M.I., kand. tekhn. nauk; AZBEL', D.I., inzh.

Calculation of the effectiveness of the improvement of heat networks.  
Elek. sta 36 no.6:41-44 Je '65. (MIRA 18:7)

СОНОВНИКОВИ, М.И., науч. труды, 1964

Calculation of the effect of structural number in cooling networks based on the study of the convection flow. *Изв. высш. учеб. зав.; energ.* 8 no.12:43-50 D 1965.

(MIRA 19:1)

1. Ivanovskiy energeticheskiy institut imeni V.I.Lavina.  
Predstavlena kafedroy teplovykh elektricheskikh stantsiy.  
Submitted June 10, 1964.

SHCHEPETIL'NIKOV, N.

Shchepetil'nikov, N. "Combined worm-skip removal of clinkers,"  
Zh.-d. transport, 1948, No. 12, pp.79-81

SO: U-3264, 10 April 53 (Letopis 'Zhurnal 'nykh Statey, No. 4, 1949).

SHCHEPETIL'NIKOV, N.M., arkhitektor

Problems of the external public services and amenities  
of the capital. Gor.khoz.Mosk. 36 no.2:9-11 F '62.  
(MIRA 16:2)  
(Moscow--Architecture)

LASKORIN, B.N.; PUSHLENKOV, M.F.; BRESTOVY, A.M.; SMIRNOV, V.F.;  
SHEPEL'NIKOV, N.N.

Horizontal mix-and-settle extractor. Ekstr.; kor., prim., app.  
no. 2:347-360 '62. (MIRA 15:9)  
(Extraction apparatus)

SECURITY INFORMATION

S. I. Ilyin, E. V. ... S. I. Ilyin, E. V. ... - "On the number of satellites in planetary systems," Sbornik nauchnykh i tekhnicheskikh rabot (Acad. Sci. SSSR, Inst. Technol. Sci.), Vol. VI, Issue 1, 1969, p. 10-13

SO: U-3600, 10 July 69, (Lent in 'Mirovaia Inzhiniring', No. 9, 1969).

01731

УРЕДНИК, В. А. ПЕТРОВИЧЕВИЧ, В. А.

Уређеније чеода спателитов у планетарној механици.  
Труды Моск. електротехн. ин-та инженероу зб. - д. транспорта ин.  
Дзержинскоу, Вып. 58, 1949, с. 111-26.

СС: Изопис' Журнал'нык' Статей, No. 26, Москва, 1949

SHCHEPETIL'NIKOV, V.A., dotsent; KAMENSKIY, V.A., inzhener.

Determining the magnitude of allowable unbalance in traction motor  
armatures. Trudy MEMIIT no.63:195-218 '53. (MLRA 7:12)  
(Armatures) (Electric railway motors)

*Shchepetil'nikov, V. A.*

USSR/ Engineering - Balancing methods

Card 1/1 Pub. 128 - 8/34

Authors : Shchepetil'nikov, V. A., and Kamenskiy, V. A.

Title : Expedient methods for balancing rotors on non-automatic machines with a pendulum frame

Periodical : Vest. mash. 12, 31-34, Dec 1954

Abstract : A narrative report is presented concerning the aligning of various types of rotors by means of a nomograph and a phase-meter, and a description is given of balancing methods. Drawings; diagrams.

Institution : .....

Submitted : .....

SHCHEPETIL'NIKOV, V.A., kandidat tekhnicheskikh nauk.

Theory of the operation of dynamic balancing of serial rotors by  
the nomograph method. Trudy MIIT, no. 82/83:258-293 '55. (MLRA 9:8)  
(Balancing of machinery)

SHCHEPETIL'NIKOV, V.A.; KAMENSKIY, V.A., kandidat tekhnicheskikh nauk.

Investigation of the operation of an electromagnetic phase indicator. Trudy MIIT no.82/83:310-330 '55. (MLRA 9:8)  
(Balancing of machinery)

SHCHEPETIL'NIKOV, V.A., kandidat tekhnicheskikh nauk; GABRIEL'YANTS, A.A.,  
kandidat tekhnicheskikh nauk.

Spark indicator of unbalance. Trudy MIIT no.82/83:331-340 '55.  
(MLRA 9:8)

(Balancing of machinery)

SHCHEPETIL'NIKOV, V.A., kandidat tekhnicheskikh nauk.

Problem of the uneven wear of brake shoes. Trudy MIIT no.82/83;  
366-381 '55. (MLRA 9:8)

(Railroads--Brakes)

SOV/124 58-2 1601

Translation from Referativnyy zhurnal Mekhanika, 1958, Nr 2, p 17 (USSR)

AUTHOR: Stechepet'nikov, V. A.

TITLE: ~~The Determination of the Center of Mass of Mechanisms in~~  
Correction with the Balancing Problem (Opredeleniye tsentra mass  
mekhanizma s vyaz'nykh zadachey ikh uravnoveshivaniya)

PERIODICAL: Izv. Akad. Nauk SSSR, 1957, Nr 92/11  
pp 211-233

ABSTRACT: A new method is described for the analysis of the displacements of the overall center of mass of a multi-link mechanism. The method consists of double similar transformation and employs a tie to the center of mass by means of two chuck groups. Such an auxiliary mechanism reproduces accurately the motion of the center of mass of the original mechanism. The method is illustrated by examples worked for four- and eight-link mechanisms of the second class and mechanisms containing groups of the third and fourth class. It is shown that mechanisms balanced by means of balance weights can be synthesized through a selection of masses and centers of gravity of the links.

M. K. Kristi

Card 1/1

SHCHEPETIL'NIKOV, V.A. Doc Tech Sci -- (diss) "Bases of  
static <sup>e</sup> - dynamic balancing of <sup>the</sup> rotating parts <sup>of</sup> rolling  
stock." Mos, 1958. 36 pp. (Min<sup>of</sup> Railways USSR. Mos Order of  
Lenin and Order of Labor Red Banner Inst of Engineers of  
Railroad Transport im I.V. Stalin.) 120 copies.

List of ~~the~~ author's works: pp 34-36.

(KL, 12-58, 98)

SHCHEPETIL'NIKOV, V.A., kand.tekhn.nauk, dotsent

Fifth-class type B balancing machines. Trudy MIIT no.97:125-175  
'58. (MIRA 11:8)

(Balancing of machinery)

SHCHEPETIL'NIKOV, V. A. doktor tekhn.nauk, dots.

One characteristic of balancing railroad car wheel pairs.  
Trudy MIIT no.102:36-44 '59. (MIRA 12:10)  
(Car wheels)

SHCHEPETIL'NIKOV, V.A., doktor tekhn.nauk

Determining the rated unbalance factors for the traction engines  
of locomotives. Trudy MIIT no.128:5-38 '60. (MIRA13:7)  
(Balancing of machinery) (Locomotives)

SHEPTEL'NIKOV, V.A., doktor tekhn.nauk

Determining permissible unbalances in counterweight planes. Trudy  
MIIt no.128:39-52 '60. (MIRA 13:7)  
(Balancing of machinery)

SHCHEPELIL'NIKOV, V.A., doktor tekhn.nauk; KAMENSKIY, V.A., kand.tekhn.  
nauk

Effect of car wheel unbalance on the motion of the car truck.  
Trudy MIIT no.128:66-76 '60. (MIRA 13:7)  
(Car wheels) (Balancing of machinery)

SHCHEPETIL'NIKOV, V.A., doktor tekhn.nauk, prof.

The "M-59" balancing machine designed by the Moscow Institute  
of Railroad Engineering for the balancing of car wheel pairs.  
Trudy MIIT no.150:5-28 '62. (MIRA 16:2)  
(Car wheels: Maintenance and repair) (Balancing of machinery)

SHCHEPETIL'NIKOV, V.A., doktor tekhn. nauk, prof., red.; STROGANOV,  
L.P., inzh., red. izd-va; AKIMOVA, A.G., red. izd-va;  
MODEL', B.I., tekhn. red.

[Theory and design of balancing machinery] Teoriia i konstruk-  
tsiia balansirovochnykh mashin. Moskva, Mashgiz, 1963. 442 p.  
(MIRA 16:7)

(Balancing of machinery—Equipment and supplies)

SHCHEPETIL'NIKOV, V.A., doktor tekhn. nauk, prof., red.;  
STROGANOV, L.P., inzh., red.

[Balancing of machines and instruments] Uravnoveshivanie  
mashin i priborov. Moskva, Mashinostroenie, 1965. 570 p.  
(MIRA 18:12)

RIDEL', E.I., kand. tekhn. nauk; SVIRIDOV, V.A., inzh.; SHCHEPELIL'NIKOV,  
V.A., doktor tekhn. nauk

Automatic hook designed at the Moscow Institute of Railroad  
Engineers. Mekh. i avtom. prolyzv. 19 no.8:29 Ag '65.  
(MIRA 18:9)

L 14962266 EWT(a)/FSS-2/ENT(m)/ENP(w)/EEO(k)-2/BIC(m)-6 IUP(c) WW/BW/CS/BI  
 ACC NR: AT6001701 (A) SOURCE CODE: UR/0000/65/000/000/0007/0016

AUTHOR: Shchepetil'nikov, V. A. (Doctor of mechanical sciences, Professor) 70  
67

ORG: none B+1

TITLE: Current state of the art of balancing technology 26

SOURCE: Uravnoveshivaniye mashin i priborov (Balancing of machinery and instruments).  
 Moscow, Izd-vo "Mashinostroyeniye", 1965, 7-16

TOPIC TAGS: rotor balancing, ~~balancing machinery~~, turbine rotor, compressor rotor,  
*electric rotating equipment part, engineering instrument*

ABSTRACT: The state of the art of rotor balancing technology is discussed. All types of balancing machines are broken into seven classes (according to the number of degrees of freedom), with types A and B in each class (except class VII) (see Fig. 1). Class IA includes all machines for static balancing of rotors which can rotate only around their axis. Machines of more complicated classes are normally used for static balancing. For example, MVTU has developed a class VIIA machine which can balance rotors of 3--1000 newtons at 1450 rpm with an accuracy of 1 micron (foreign machines achieve 5 microns with rotors to 1000 n). Class IB machines have stationary mounting but measure the reaction forces. Of the many types developed, one, the MDUS-6 (5--500 n, 0.01 micron, 3--30 000 rpm), received a prize in 1962. Foreign machines of this type were developed several years later than in the USSR and are less accurate.

Card 1/3

L 13962-66  
ACC NR: AT6001701

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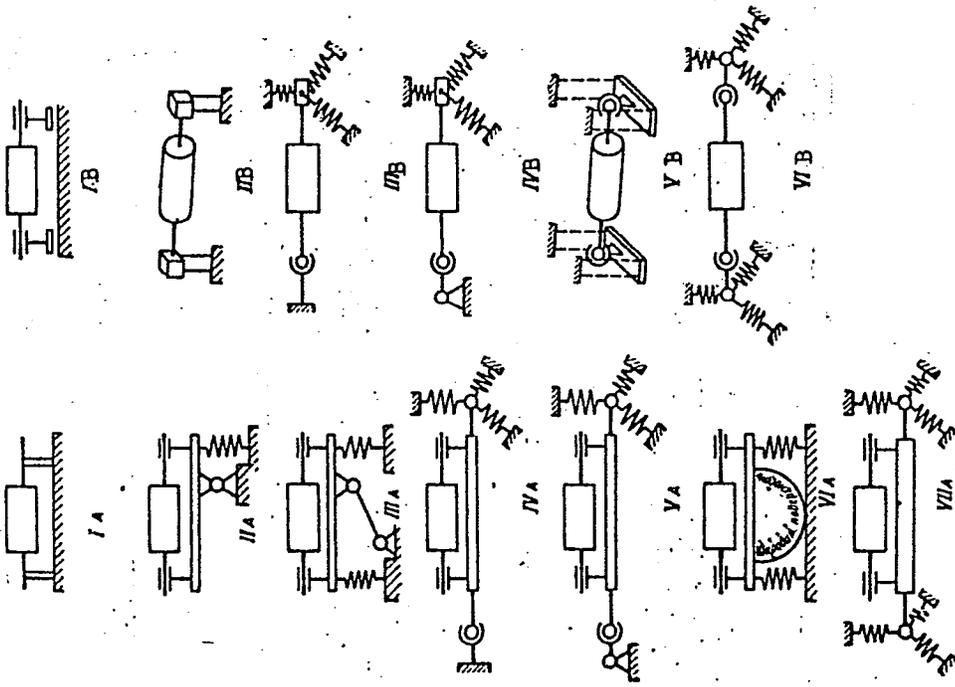


Fig. 1. Kinematic configurations of balancing systems.

Card 2/3

L 13962-66

ACC NR: AT6001701

3

Class IIA and IIB machines were developed at MIIT (Class IIA: 1--50 n, 0.5 micron; 250--6000 n, 1 micron; Class IIB: unspecified). A basic mistake of foreign class IIB machines was discovered, published, and corrected in 1956-57 (in the SSSR). Balancing machines of the companies Hofman-Kunze and General Motors Co. belong to classes IIIA and B respectively. A class IIIB machine was developed at MVTU, but these classes have not found wide application in the SSSR, while class IVB machines are used in industry. None are produced in the SSSR. Class VB machines have been designed in various modifications by ENIMS, NIAT, MVTU, and others. In 1962 ENIMS built the smallest one (0.1-3 n, 0.1 micron, 1500--5500 rpm), and now a whole line has been designed for weights of 0.1--10<sup>6</sup> n. Class VA and VIA and B machines are not used in the SSSR. Only class VIIA machines are used (as mentioned under class I machines). The need for detailed theoretical study and improved design of balancing machines for flexible rotors (with accelerating facilities) is discussed. Development of specific tables of required balancing accuracies instead of the inadequate foreign universal tables is urged. The necessity for developing the theory and equipment for balancing rod and linkage mechanisms and complicated machinery is also stressed. Orig. art. has: 1 figure.

SUB CODE: 13/ SUBM DATE: 04Sep65/ ORIG REF: 002

OC

Card 3/3

L 15197-66 EWT(d)/EWP(v)/EWP(k)/EWP(h)/EWP(l) GS

ACC NR: AT6001713

(N)

SOURCE CODE: UR/0000/65/000/000/0399/0411

AUTHOR: Shchepetil'nikov, V. A. (Doctor of technical sciences, Professor)

20

ORG: none

14

17

B+1

TITLE: New principle for approximate balancing of a crank and slider mechanism

SOURCE: Uravnoveshivaniye mashin i priborov (Balancing of machinery and instruments). Moscow, Izd-vo Mashinostroyeniye, 1965, 399-411

TOPIC TAGS: engine crankshaft, balancing theory, kinematic linkage, solid kinematics

ABSTRACT: The motion of the center of mass of a crank and slider mechanism is studied, the hodograph and center of the unbalanced forces are determined, and a new method for approximate balancing of the inertial forces and of the first harmonic of the inertial torques using a single compensating weight is presented. The derivation of the equations of motion of the center of mass S of the mechanism shown in Fig. 1 is based on the fact that the motion of S is the same as that of S<sub>1</sub> (where  $\bar{h}_i$  are the principal vectors of the kinematic circuit) and can be found from the motion of a similar crank and slider mechanism as shown in Fig. 2. Using this fact and a number of approximations, the equations for the velocity and acceleration components (x and y) are derived. Since the components of the unbalanced forces are given by

$$\left. \begin{aligned} \bar{P}_{nx} &= -(m_1 + m_2 + m_3) \bar{W}_{sx} \\ \bar{P}_{ny} &= -(m_1 + m_2 + m_3) \bar{W}_{sy} \end{aligned} \right\}$$

L 15197-66

ACC NR: AT6001713

Fig. 1. Geometry of linkage.

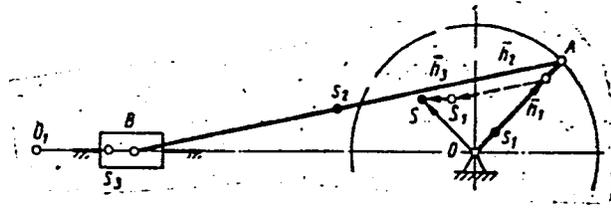
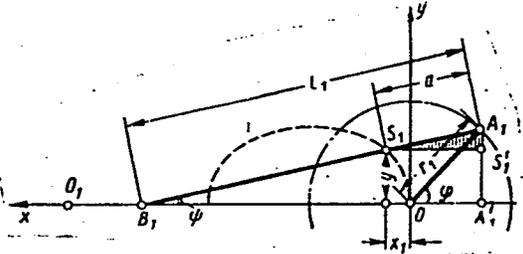


Fig. 2. Similar mechanism which determines the path of motion of the center of mass of the original linkage.



(where  $W_s$  = acceleration of the center of mass) and the acceleration components have already been derived, an approximate center for the unbalanced forces can be found and a hodograph of the unbalance vector can be constructed. A weight  $M$  rotating synchronously but out of phase with the crank will approximately balance the inertial forces (since the path of  $S$  is not exactly a circle the net unbalance varies over the cycle). The same compensating weight can be used to balance approximately the first

Card 2/3

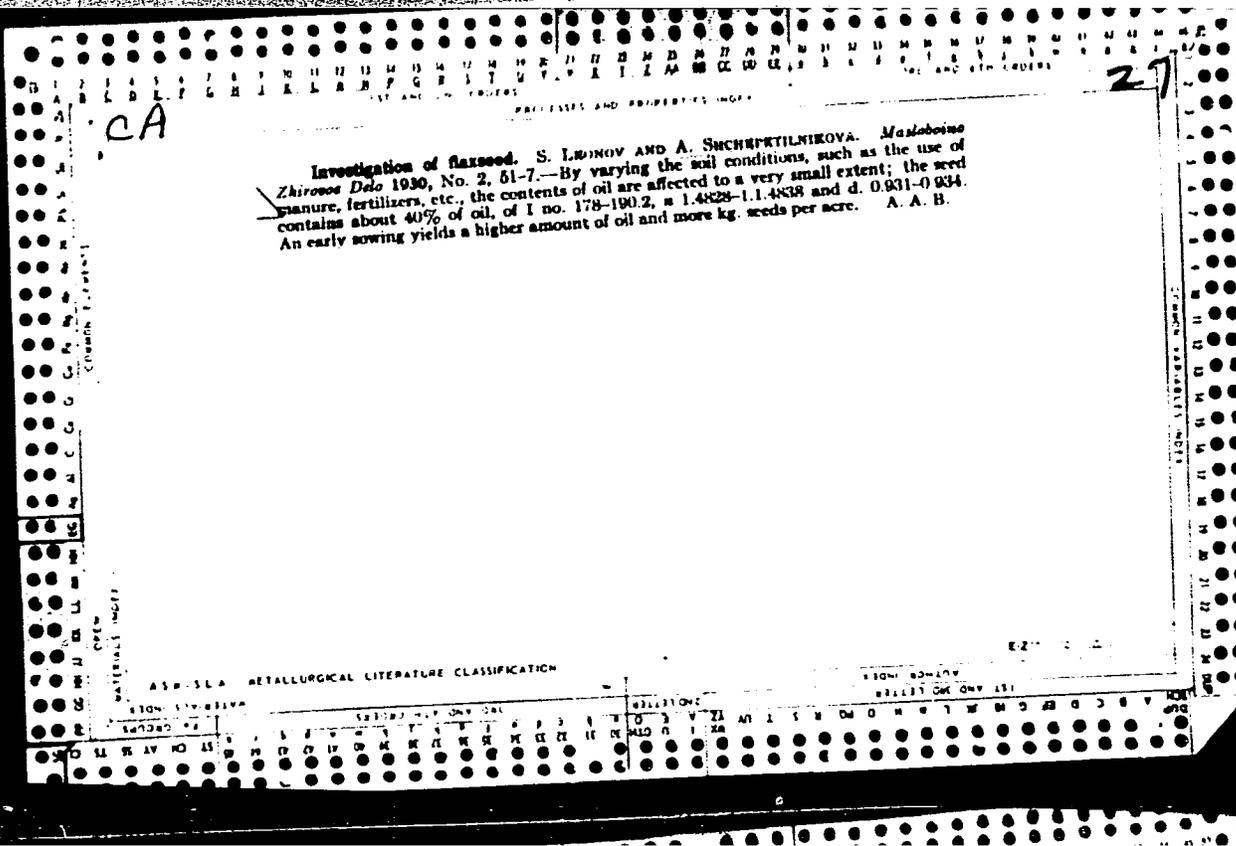
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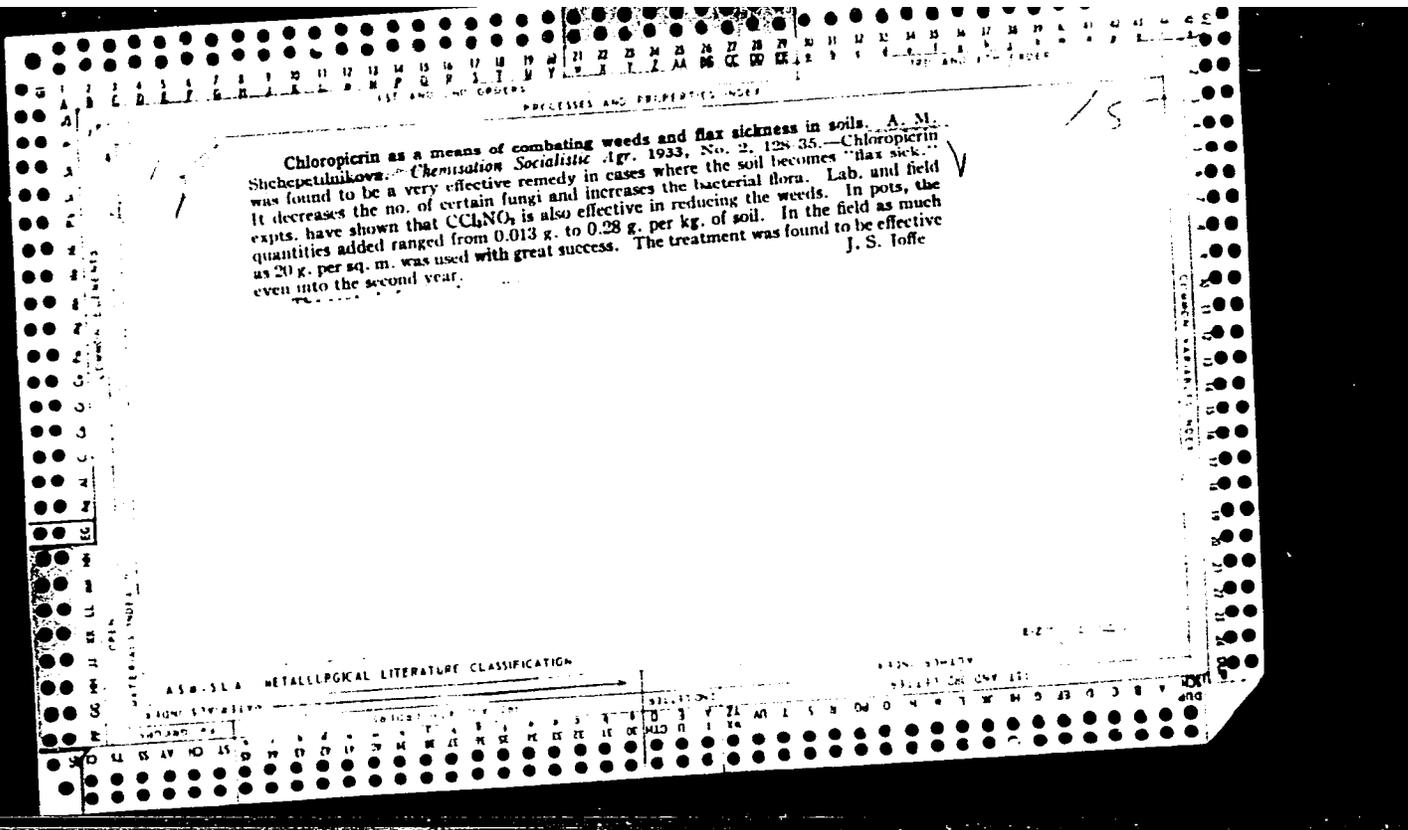
ACC NR: AT6001713

harmonic of the inertial torques by displacing the center of rotation of the compensating weight. Equations are derived for locating the center of rotation  $O_1$  of the compensating weight. Orig. art. has: 66 formulas, 12 figures, and 1 table.

SUB CODE: 10/13/ SUBM DATE: 04Sep65/ ORIG REF: 002

TS  
Card 3/3





Chloropicrin as a factor in the mobilization of nutrients  
 in the soil. A. Shchepetilnikova and A. Cherenkova.  
*Chemistry of Soil* (USSR) No. 8, 39-44  
 (in English) 51:29(1977). Chloropicrin in quantities  
 from 0.06 to 0.25 g. per kg. of soil (podzolic and chernozem)  
 in combination with P and K increased the yield of  
 oats in pot exper. from 47% on the podzols to 70-72%  
 on the chernozem. The chloropicrin acts on the org.  
 matter inasmuch as it affects the microbial flora. It  
 increases the absorbed  $\text{NH}_4$ , decreases the nitrate forma-  
 tion, increases the release of  $\text{CO}_2$  and water-sol. org.  
 matter, mobilizes the P from the soil, and in some cases it  
 also mobilizes the K. The chloropicrin is adsorbed by the  
 soil and is partially decomposed, giving off  $\text{CO}_2$ ,  $\text{HCl}$  and  
 $\text{HNO}_3$ .

ASAC SIA METEOROLOGICAL LITERATURE CLASSIFICATION



The reasons for the different effectiveness of chloro-  
 pterin on various soils. A. M. Nichepoldnikova and V.  
 G. Cherenisova. *Vestnyk Nauchno-Issledovatel'skoi  
 Instituta Agrotekhniki i Agropokhovdeniya im. Ge-  
 deitsa, Priimenenie Antiseptikov v Tselnykh Porycheniyakh  
 Tsel'halosti* 1939, 41-57; *Khim. Referat. Zhur.* 1940, No.  
 7, 16; cf. C. I. 33, 5075. The effect of chloro-  
 pterin on unexhausted soils increases with the increase of the con-  
 tent of org. substances in these soils. Chloro-  
 pterin increases the decompn. of org. substances and facilitates the  
 accumulation of the N, P and K nutritive substance.  
 Treating the soil with chloro-  
 pterin decreases the content  
 of nitrates and increases the content of NH<sub>4</sub><sup>+</sup> in the soils.  
 A stimulating effect of chloro-  
 pterin on the root system of  
 plants was observed. W. R. Heim

The use of chloropicrin in fighting soil parasites under  
hothouse conditions. A. M. ...  
...  
...  
W. K. Hill

AS 554 METALLURGICAL LITERATURE CLASSIFICATION

